U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

DECLARATION AND POWER OF ATTORNEY

ATTORNEY'S DOCKET NO. 2345/17

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name,

I believe I am an original, first, and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled METHOD FOR MANUFACTURING A CALIBRATED LINEAR SCALE IN THE NANOMETER RANGE FOR TECHNICAL DEVICES USED FOR THE HIGH-RESOLUTION OR ULTRAHIGH-RESOLUTION IMAGING OF STRUCTURES AND SUCH LINEAR SCALE, the specification of which was filed on February 6, 1997 as U.S. Serial No. 08/795,622.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

PRIOR FOREIGN APPLICATION(S)

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | DATE OF ISSUE (day, month, year) | PRIORITY CLAIMED UNDER 35 U.S.C. § 119 |
|---------|-----------------------|--------------------------------------|-------------------------------------|--|
| Germany | 196 04 348.4 | 07/02/96 | | YES |

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys:

Richard L. Mayer (Reg. No. 22,490) William C. Gehris (Reg. No. 38,156)

SEND CORRESPONDENCE, AND DIRECT TELEPHONE CALLS TO:

Richard L. Mayer KENYON & KENYC One Broadway New York, New York 10004 (212) 425-7200 (phone (212) 425-5288 (facsin I declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.

| | | | | |
|-------------------------|--------------------------|--------------------------|-----------|-----------------------------|
| FULL NAME OF | FAMILY NAME | FIRST GIVEN NAME | | SECOND GIVEN NAME |
| INVENTOR | Loesch | Rainer | | |
| RESIDENCE & | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| CITIZENSHIP | 68766 Hockenheim | German | y | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Schillerstrasse 2 | 68766 H | ockenheim | Germany |
| Signature | Painer Cosa | | Date 26 | .03.97 |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN | NAME | SECOND GIVEN NAME |
| INVENTOR | Hillmer | Hartmut | | |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| | 64287 Darmstadt | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Peter-Behrens-Strasse 12 | 64287 Darmstadt | | Germany |
| Signature | | | Date | |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN | NAME | SECOND GIVEN NAME |
| INVENTOR | Schlapp | Winfried | | |
| RESIDENCE & | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| CITIZENSHIP | 64331 Weiterstadt | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Friedhofsweg 11 | 64331 Weiters | | Germany |
| Signature | | | Date | |
| And the second | | <u> </u> | | |

I declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.

| FULL NAME OF | FAMILY NAME | FIRST GIVEN | I NAME | SECOND GIVEN NAME |
|--------------------------|---------------------|--------------------------|---------------|-----------------------------|
| INVENTOR | Loesch | Rainer | | SECOND GIVEN NAME |
| RESIDENCE & | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| CITIZENSHIP | 68766 Hockenheim | German | y | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Schillerstrasse 2 | 68766 H | ockenheim | Germany |
| Signature | | | Date | |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN NAME | | SECOND GIVEN NAME |
| INVENTOR | Hillmer | Hartmut | | |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| | 64287 Darmstadt | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| Peter-Behrens-Strasse 12 | | 64287 Darmstadt | | Germany |
| Signature M. Milw | | | Date 26/03/37 | |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN NAME | | SECOND GIVEN NAME |
| INVENTOR | Schlapp | Winfried | | |
| RESIDENCE & | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| CITIZENSHIP | 64331 Weiterstadt | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY STATE & | | STATE & ZIP CODE/COUNTRY |
| Friedhofsweg 11 | | 64331 W | eiterstade | Germany |
| Signature V. | Pehlapp | | Date 1. 9 | 4. 97 |

| | | | | , |
|--------------------------|-----------------------------|-----------------------------|---------------|-----------------------------|
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | | SECOND GIVEN NAME |
| | Poecker | Armin | | |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| | 64625 Bensheim | German | y | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Maerkerwaldstrasse 3 | 64625 Bensheim | | Germany |
| Signature A | min Relies | | Date March | 26,1997 |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN | | SECOND GIVEN NAME |
| INVENTOR | Betz | Walter | | |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | | COUNTRY OF CITIZENSHIP |
| CITIZENSIII | 64342 Seeheim- Jugenheim | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Im Strehling 6 | 64342 Seeheim- Jugenheim | | Germany |
| Signature Galder Rek | | | Date March | 26, 1997 |
| FULL NAME OF | FAMILY NAME | FIRST GIVEN NAME | | SECOND GIVEN NAME |
| INVENTOR | Goebel | Rainer | | |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FO | REIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| | 55129 Mainz | Germany | | Germany |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | | STATE & ZIP CODE/COUNTRY |
| | Hebbelstrasse 85 | 55129 Ma | ainz | Germany |
| Signature A | L-a MI | | Date D3. | 24.76 |

ASSIGNMENT

WHEREAS, we,

Rainer Loesch Schillerstrasse 2 68766 Hockenheim

Germany

Citizenship: German

and

Hartmut Hillmer

Peter-Behrens-Strasse 12

64287 Darmstadt

Germany

Citizenship: German

and

Winfried Schlapp Friedhofsweg 11 64331 Weiterstadt

Germany

Citizenship: German

and

Armin Poecker

Maerkerwaldstrasse 3

64625 Bensheim

Germany

Citizemship: German

and

Walter Betz Im Strehling 6

64342 Seeheim -Jugenheim

Germany

Citizenship: German

and

Rainer Goebel Hebbelstrasse 85 55129 Mainz Germany

Citizenship: German

have made new and useful improvements in a METHOD FOR MANUFACTURING A CALIBRATED LINEAR SCALE IN THE NANOMETER RANGE FOR TECHNICAL DEVICES USED FOR THE HIGH-RESOLUTION OR ULTRAHIGH-RESOLUTION IMAGING OF STRUCTURES AND SUCH LINEAR SCALE, for which an application for Letters Patent was filed on February 6, 1997, as U.S. Serial No. 08/7951,622, and

WHEREAS Deutsche Telekom AG, having a place of business at Friedrich-Ebert-Allee 140, 53113 Bonn, Germany and who, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited,

NOW, THEREFORE, for valuable consideration furnished by Assignees to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservations:

- 1. Assign, transfer, and convey to Assignees the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in any and all countries, including all divisional, renewal, substitute, continuation, and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent.
- 2. Authorize Assignees to file patent applications in any or all countries for any or all of said inventions and discoveries in our name or in the name of Assignees or otherwise as Assignees may deem advisable, under an International Convention or otherwise.
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignees, as assignees of the entire right, title, and interest therein or otherwise as Assignees may direct.
- 4. Warrant that we have not conveyed to others any right, title, or interest in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; that we have good right to assign the same to Assignees without encumbrance; and that we are aware of no claim to the contrary.
- 5. Bind our heirs, legal representatives, and assigns, as well as ourselves to do, upon Assignees' request and at Assignees' expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignees as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this assignment had not been made; and

particularly to execute and deliver to Assignees all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignees; to communicate to Assignees all facts known to us relating to said inventions and discoveries or the history thereof; to furnish Assignees with any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries; and to testify to the same in any interference, arbitration, or litigation.

| | IN TESTIMONY | WHEREOF, I have hereunto set my hand and s | eal this / | 26 | day |
|------|--------------|--|------------|----|-----|
| of _ | Ward | _, 1997. | | | • |

Rainer Loesch

WITNESSED BY:

WITNESSED BY:

Blumenstr. 15a 79194 Gurdelfinsen

2 dscher Konrod

| of <u>Naich</u> , 1997 | REOF, I have hereunto set my hand and seal this 26 day 7. |
|----------------------------|---|
| WITNESSED BY: | Hartmut Hillmer |
| Hansjörg Schöll Name | |
| Eulerwez 2 | Hansing Julie |
| 64347 Griesheim Address | . 1 |
| WITNESSED BY: | |
| Remd Klepser Name | Cond Kepses |
| Vicsenbadio Str. 82 | |
| Address | |

| IN TESTIMONY WHEREOF, I h | ave hereunto set my hand and seal this day |
|---|--|
| | W. Chelapp Winfried Schlapp |
| WITNESSED BY: | |
| Revale Sieger Name Nibelingenstr. 171 64625 Bensheim Address | Revale Sieger |
| WITNESSED BY: Hansjörs Schöll Name () Eulerweg 2 64347 Griesheim Address | Harij. Will |

| • • | |
|---|---|
| of <u>March</u> , 1997. | F, I have hereunto set my hand and seal this 26 day |
| | Armin Poecker |
| WITNESSED BY: | • |
| Helga Janning Name Janning Bartning Str 13 64289 Darm Stadt Address | Helga Ja |
| WITNESSED BY: Peter Hellmuth Name Breslaver Str. 3 64342 Seeheim Address | Peter Willmit |

| IN TESTIMONY WHEREOF, of, 1997. | I have hereunto set my hand and seal this 26 day |
|---|--|
| | Valder Doby Walter Betz |
| WITNESSED BY: | |
| Helac Janning Name Janning Bartningsh. 13 64289 Darmsladt Address | Velga Ja |
| WITNESSED BY: Peter Hellmoth Name | |
| Breslaver Str. 3 64342 Seeheim Address | Letwe Wellmint |

| • • • • | |
|--|--|
| of \mathcal{H}_{acc} , 1997. | have hereunto set my hand and seal this 26 day |
| | Rainer Goebel |
| WITNESSED BY: | |
| Helga Janning Name Bartningstr. 13 64289 Darmsladt Address | Helga Jaig |
| WITNESSED BY: Peter Hellmuth Name Breslaver Str. 3 64342 Seeheim | Teter Wellnut |
| Address Address | |